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ABSTRACT

Adult continuing education (ACE) can be a major force in human capital development and an integral part of lifelong learning. Although recognition of the importance of ACE in developed countries is increasing, the impact of ACE is not well understood in some middle-income countries (MICs), there is a lack of leadership, and the sector is somewhat underdeveloped. ACE must be viewed as a number of interrelated policies and delivery systems reflecting the needs of different clients and components of ACE. Successful governance of ACE depends on involving key stakeholders. Major issues that need to be addressed include equity, access, and support for career progression for adults. Although individuals and/or employers often bear the financial costs of ACE, there is recognition of the need for investment of some public funds to support ACE programs in literacy and foundation education and for some categories of clients to ensure access and promote equity objectives. MICs that are developing ACE as an integral part of lifelong learning must adopt policy and delivery models addressing learning objectives through a combination of short- and long-term programs to

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ADULT CONTINUING EDUCATION: AN INTEGRAL PART OF LIFELONG LEARNING

Emerging Policies and Programs for the 21st Century in Upper and Middle Income Countries

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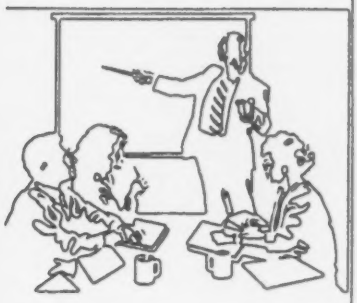
April 2000



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World Bank Discussion Paper

April 2000

ADULT CONTINUING EDUCATION:

AN INTEGRAL PART OF LIFELONG LEARNING

EMERGING POLICIES AND PROGRAMS FOR THE 21 CENTURY

IN UPPER AND MIDDLE INCOME COUNTRIES

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Summary

This paper reviews issues related to definition, governance and administration, financing, delivery, and evaluation of Adult Continuing Education (ACE) in upper and middle income countries. Adult Continuing Education can be a major force in human capital development, is an integral part of lifelong learning, and enrolls more individuals than the initial and higher education combined. Lifelong learning needs to begin early in public schools, where problem solving and basic education skills must be developed to support ACE, the topic of this paper. While there is growing recognition of the importance of ACE in developed countries, the impact of ACE is not well understood in some Middle Income Countries (MICs), there is a lack of leadership, and the sector is somewhat under-developed.

ACE is not, and should not, be viewed as one system but rather as a number of interrelated policies and delivery systems that reflect the needs of different clients and components of ACE. ACE includes literacy and foundation education, developmental education, civics education, and career and vocational education components. Many lower income countries remain focused on provision of basic literacy education, or what is sometimes referred to as "second chance education". However, many MICs have achieved increasingly higher levels of basic literacy, and as such are broadening ACE, to create what may be termed "expanded chance" education. In addition, MICs are developing more formal linkages between initial and adult continuing education, and beginning to eliminate distinctions between formal and non-formal education to facilitate implementation of overall lifelong learning concepts.

Successful governance of ACE depends on involving key stakeholders if a coordinated and multi-faceted program is to be envisioned. Models that promote the development of isolated single components by Government Ministries often result in overlapping and poorly articulated programs. Key issues that need to be addressed include equity, access, and support for career progression for adults. Financing reflects the range of programs and clients including: youth and first-time job entrants, the unemployed, the employed, and older workers and retired individuals. While the financial costs of ACE are often carried by individuals and/or employers, there is recognition of the need for investment of some public funds to support ACE programs in literacy and foundation education, and for some categories of clients (e.g. youth/time job entrants, the unemployed, and the disenfranchised) to meet ensure access and promote equity objectives.

The delivery of ACE is carried out by a multiplicity of institutions including those which are publicly owned, public private partnerships, private for profit, and NGOs. Different institutions often focus on different clients and programs. Decentralization and privatization can support development of the ACE delivery network, but can result in problems with equity, access, program articulation, and program quality if there is a void in leadership, governance, and financing in the sector. Initiatives which are being used to

overcome these problems include development of national standards and certification programs, inter-institutional articulation agreements, institutional accreditation programs, and citizen skill bank systems. While there is a considerable body of knowledge about adult learning theory and distance learning, both fields are relatively undeveloped in MICS and as a result program delivery is not as effective as it could be.

Evaluation of ACE is generally lacking in MICs, and when it is done it usually focuses on evaluation of inputs (e.g. staff and facilities) and the extent to which participants reach program objectives, as opposed to evaluating the gross or net program impact (e.g. impact on employment and wages). While the difficulties of evaluating development and civics education are recognized, there is increasing recognition of the need to undertake more comprehensive evaluations of the impact of foundation and skill education and training. Recent studies, some of which have been done in MICs, indicate that literacy and skill training do have a positive impact on productivity, employment, and wages. However, there is evidence that employers are often reluctant to train poorly educated workers. This finding re-emphasizes the need for lifelong learning to begin with youth in initial education.

In summary, the importance of ACE and lifelong learning is increasingly recognized in MICs. Efforts are being made in a number of countries to broaden the definition and type of programs available, establish leadership and coordination mechanisms, while at the same time creating multiple channels of financing and encouraging decentralization and diversification of supply. The Government's role in ACE should primarily be one of creating a policy and regulatory framework, in cooperation with key stakeholders; promotion of professional development in ACE; and limited and carefully targeted participation in the financing and delivery as needed to help ensure equity, access, and quality in ACE. The challenges are considerable, but the development of ACE as an integral part of lifelong learning is of paramount importance in MICs if they wish to compete successfully in the global economy.

The contents of this paper reflect a review of ACE and lifelong learning policy and programs that was undertaken between 1997 to 1999 with the support of a World Bank Professional Development Grant. Because of time and resource constraints this paper focuses on post-compulsory (normally post-secondary) pre-university programs in upper and middle income countries. However, it is recognized that one cannot and should not separate discussion of initial from continuing education and that universities do play a substantial role in ACE in most countries. The review included intensive on-site discussions with policy makers, at the national level, as well as regional and local institutions which were delivering ACE in: Korea, Malaysia, Philippines, United Kingdom, United States, France, Sweden, Italy, Slovenia, Hungary, Chile, and Brazil. The review also included participation in several related international conferences on the topic, sponsored by UNESCO, ILO, OECD, visits and discussions with staff at the IDB, ADB, ILO, EU/ETF, and OECD, as well as presentation and discussions of drafts of the

paper in Chile, Argentina, Georgia, Southeast Asia (Australia) and at Human Development Week in the Bank.

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I. Introduction and Background

1.1 This paper reviews issues related to the definition, governance and administration, financing, delivery, and evaluation of Adult Continuing Education (ACE) in upper and middle income countries. Before embarking on a detailed discussion of each of these issues is useful to briefly review the beginnings of ACE, current scope, and general trends. Adult and Continuing Education, in this paper, is generally defined as including post-compulsory school in-service education and training. Adult and Continuing Education is an integral part of the overall process of lifelong learning and can make a significant contribution to human capital and economic development.

1.2 *The Beginnings*: The origins of adult education can be found in the eighteenth century, particularly in Northwest Europe and North America. Much of the terminology involved in the field reveals the influence of the Enlightenment and movements for the education of people (Titmus 1996). As the nineteenth century progressed, the separation of education for grown persons from that of children increased with the achievement of universal childhood education, and the movements for popular education or Enlightenment shifted and concentrated more on the needs of adults. The idea that education should become a lifelong process, and that all persons, whatever their previous education or social status, needed to continue their education in adult life was not unknown in the nineteenth century, but only in the second half of the twentieth has spread to achieve almost universal acceptance.

1.3 *General Scope:* ACE enrolls more individuals than the initial public education and higher education systems combined in many countries (Bélanger and Valdivielso 1997). Notwithstanding the potential contribution of ACE to human capital and economic development, this study and others (European Training Foundation, 1999) found that the sub-sector is often under developed in many middle income countries. There are multiple reasons for this, including, but not limited to: (a) a need for some countries to allocate limited resources to other parts of the education sector, or other sectors; (b) a lack of interest in the topic among professional educators who have not been trained or involved in this part of education sector; (c) a lack of incentives and recognition among the citizens and governments as to the economic returns to investments in continuing education; (d) a lack of knowledge in enterprises about the payoffs of investing in continuing education and training; (e) a lack of recognition to the linkage between maintenance of a civil society, inward investment, and economic development; and (f) a general lack definition, leadership, and long-term planning in the sector. Table 1 following summarizes ACE participation rate in selected countries. The low levels of ACE in the developing Polish economy, where adults also tend to have low functional literacy scores, exemplify the need to improve ACE in some countries. The UNESCO study which produced this data is being extended to additional middle income countries.

Table 1- Participation in ACE (hours per year)

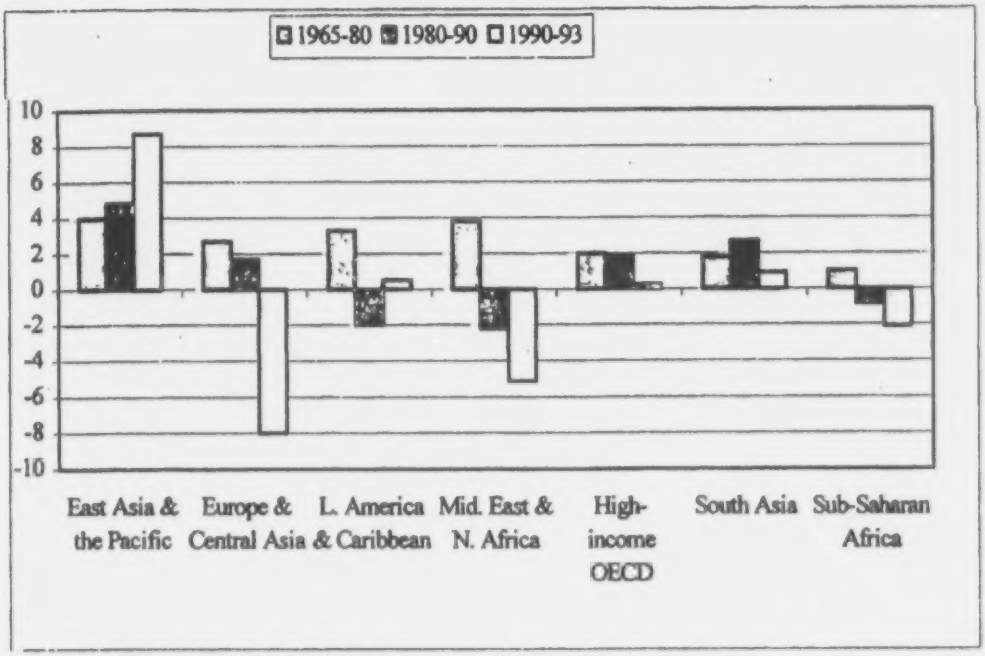
	Canada	Switzerland (German)	Switzerland (French)	United States	Netherlands	Poland
Male	306	234	310	191	256	161
Female	328	256	297	154	236	178
Total	317	245	304	172	247	169
Number of cases	1,684	513	411	1,092	968	357

Source: Bélanger and Valdivielso (1997).

1.4 *Current Trends:* ACE is increasingly recognized in many upper and middle income countries as playing a key role in development and maintenance of civil societies, development of the workforce, as making a positive contribution to overall economic development, and as an integral part of the process of lifelong learning. For example, in 1996, the European Union had a major initiative on this topic;[1] the OECD has a similar initiative underway at this time;[2] UNESCO/UNIDO sponsored a worldwide conference on the topic in 1997 in Hamburg; UNESCO joined with the ILO sponsored a related Conference in Korea in 1999; UNESCO sponsored a policy Colloquium on "Learning Never End" in 1999 as part of the UN International Year of Older Persons and International Literacy Day, and ILO initiated a conference on lifelong learning in 2000. Individual countries ranging from Korea to Slovenia to Sweden have initiated special commissions and legislation to strengthen the sub-sector. Key forces behind these activities include the globalization of trade; the rapid development of information technology and the information age; spreading of multi-national investments, development of regional economic and political entities (e.g. the EU, NAFTA, ASEAN, MERCOSUR); and Government and civil society initiatives to bring the disenfranchised into the mainstream workforce, for economic and social/political reasons; and deliberate efforts to develop learning societies. The linkages between productivity and increasing demand for higher skills in the workforce, and between education and wages, are exemplified in the following Figure 1 and Table 2, and in Figure 2 (page 6). These linkages have implications for development of ACE, particularly in the rapidly changing economies of many middle income countries.

[1] See EU internet website: HTTP:/europa. Eu.int/en/comm/dg22/socrates/adult/home.html
[2] See OECD internet website: HTTP://www.oecd.org/els/edu/els_ed.htm

Figure 1- Regional Differences in Labor Productivity (Percent)



Source: Bélanger and Valdivielso (1997).

Table 2- Employment in High-Skilled Manufacturing Industry as a Percentage of Total Manufacturing Employment[1]

Area/Countries	1980	1995 (or latest available)[2]
Latin America		
Chile	27.3	26.0
Colombia	29.8	30.3
El Salvador	16.9	19.3 *94*
Mexico	-	41.9
Uruguay	22.7	24.9
Venezuela	32.0	31.8 *93*
East and South-East Asia		
China	51.9	44.4 *94*
Hong Kong, China	36.8	38.6 *93*
Indonesia	20.3	16.6 *93*
Korea, Republic of	33.5	52.3
Malaysia	36.2	51.2
Philippines	23.7	26.4
Singapore	62.8	77.6
Taiwan, China	39.1	49.6

[1] The high-skilled manufacturing sub-sectors are: Printing and publishing, Industrial chemicals and other chemicals, Fabricated metal products, Machinery (non-electrical and electrical), Transport equipment, Professional and scientific equipment. [2] Since data for 1995 are not available for many countries, the latest available year have been used; the number in italic refers to the relevant year. Source: ILO (1999).

1.5 *Limitations of this paper*: The paper focuses on ACE, and not on the overall topic of lifelong learning, of which ACE is a component. The paper presents issues, policy, and program options for ACE in post-compulsory school, pre-university, continuing education and training in middle and upper income countries. The paper was deliberately limited because of the breadth of the topic and limitation of resources to complete the study. The paper focuses on trends in middle and upper income in recognition that the issues in less developed countries (LDCs), e.g. those qualifying for World Bank IDA funds, often have quite different economic, financial, basic education, and human capital development constraints from those found in upper and middle income countries (MICs). However, it is recognized that some MICs (e.g. Philippines, Brazil, India) have widely varying internal conditions that affect ACE and lifelong learning (e.g. large segments of the economy are rural with high illiteracy rates, in some regions the economy is not highly developed, and the workforce has only basic skills). In addition, while LDCs may not currently face some of the issues identified in this paper, they may well do so in the near future as their societies and economies develop, and even now there are segments of these economies that are affected by the issues raised in this paper.

1.6 The paper approaches ACE in a manner which allows systematic analysis of key issues influencing its development. The paper focuses on continuing education and training, as opposed to initial education, and on continuing education for adults beyond compulsory school age, which in many upper and middle income countries practically means post-secondary education and training. This limitation was done with the recognition that it is difficult and not effective to divorce initial from continuing education. Institutions and mechanisms designed to provide initial education and training are increasingly - and should be if lifelong learning is to be achieved - the same ones that provide continuing education and training. Finally, while the primary focus of the paper is on pre-university tertiary level education and training, it is recognized that universities can and do play an important role in ACE, and lifelong learning, but higher education is a very broad topic in itself and could not be addressed in this paper. The paper is not intended as a comprehensive review of all alternatives and models, but an attempt has been made to highlight specific issues and examples of "current practice" from the countries surveyed with relation to the definition, governance and administration, financing, delivery, and evaluation of ACE.

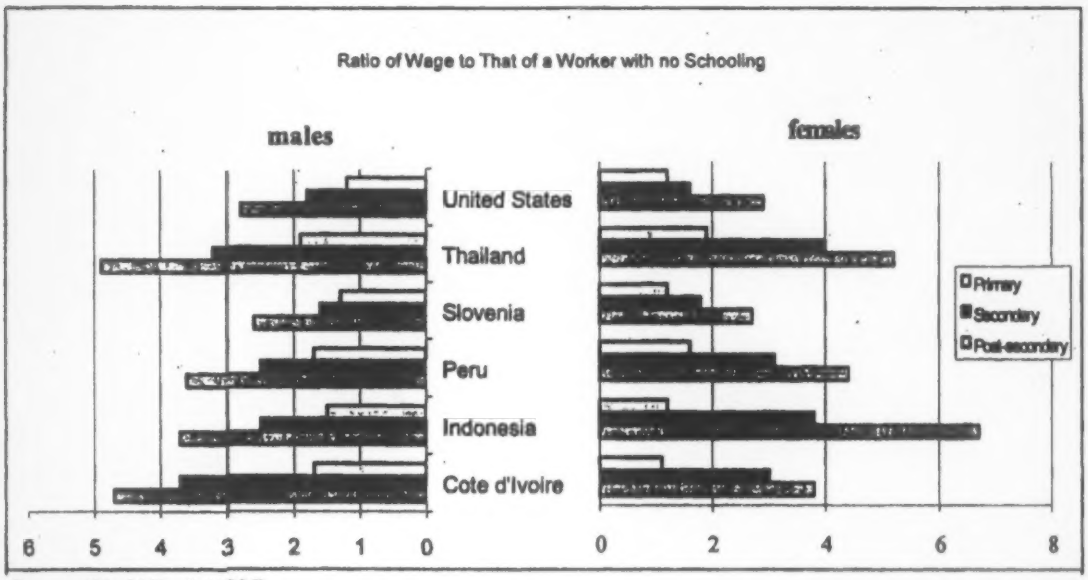
II. Defining Adult Continuing Education

2.1 This is a difficult and confusing area that must, in the end, be addressed on a country by country basis depending on local economic, institutional, and social conditions.[3] Adult Continuing Education, the primary focus of this paper, is one component of lifelong learning and there will be a large variation between how LDCs and MICs address both topics. Key definitional issues that need to be addressed include: what is the objective of lifelong learning, what is the role of ACE in lifelong learning, what types of education and training are included in ACE, and what is the interaction between initial and continuing education (ACE) within an overall framework of lifelong learning?

2.2 *What is the objective of lifelong learning and what is the role of ACE?* The objective of lifelong learning, taken in the broadest sense, is to help individuals obtain the skills and knowledge to assist them in adapting to different stages of their life including: (a) early separation from family as a youth, (b) life as a wage earner and member of society during adulthood, and (c) life as an older adult during which time individuals withdraw from the workforce and enter retirement. Initial basic education plays the key role in first stage, while ACE can make a major contribution to the latter two stages. Experience and research shows that the methods of delivering these skills to individuals at different stages of live must vary if they are to be effective (Fales 1996). Lifelong learning needs to be fostered by the society, and the initial education system, at an early age. In particular, systems need to be put in place to ensure initial learning provides a basis for future learning, and mechanisms developed so that future learning opportunities can be made part of an overall mosaic of the skills and knowledge that an individual acquires throughout his/her life-span. In this decade there have been two international assessments of initial youth learning achievements in mathematics and science: the International Assessment of Educational Progress (IAEP) in 1991 and the Third International Mathematics and Science Study (TIMSS) in 1995. On average, students from all countries tested performed less well on the problem solving and integrating items, than on the conceptual understanding and knowledge items. The latter refer to a grasp of concepts and facts and are simpler tasks. The former are more complex and are particularly important in internationally competitive economies, which involve continuous change and the need to solve unfamiliar problems. There is a considerable body of research that shows that acquisition of these key literacy and learning skills education have a positive rate of return and are an essential ingredient of earnings and productivity (Psacharopoulos 1985). Figure 2 on the next page shows the effect of education on wages in several selected LDCs, MICs and OECD countries.

[3] The 1976 General Conference of UNESCO in Nairobi defined adult education as including, among other things, the entire body of organized educational process, that it is an integral part of lifelong education and learning, and that it includes all skills and branches of knowledge.

Figure 2- Education and Wages



Source: World Bank (1995).

2.3 Older adults, as well as youth and middle aged adults, can benefit from ACE. Many countries have special programs that make use of seniors who assist with programs for other segments of society, as well as specific programs to help seniors adjust to their changing life roles. In a number of middle and upper income countries, with aging populations and lengthening life spans, this is increasingly an important social and political issue that needs to be recognized and addressed in the development of ACE. In August, 1999, UNESCO convened Colloquium in New York which addressed this topic and made a series of related policy and strategy recommendations in four key areas: literacy and basic education, personal enrichment and development, civic participation and social contribution, and life transitions. While the role of older adults in a given country will vary depending on cultural, economic, and demographic factors, there are countries where the proportion and actual number of people in the 25 to 50 year age group will actually fall by 2020, with serious ramifications for the viability of pension funds, the workforce, and implementation of ACE (Economist 1999).

2.4 *What is the role of ACE in basic and functional literacy?* Basic literacy education, including "second chance basic education" remains as a component of ACE in most upper and middle income countries. However, it is declining in importance in many middle income countries since an increasing proportion of adults have basic literacy skills as a result of improved initial education and previous ACE programs[4]. Problems with basic literacy are sometimes exacerbated in countries with immigrant and minority populations, which may not be in the mainstream of the economy or may have arrived

[4] Recent UNESCO estimates indicate that the proportion of illiterates in the adult population worldwide has fallen from one third in the past decade and will be reduced to one-fifth by the year 2000.

without basic literacy skills. Functional literacy, on the other hand, is of concern in most upper and middle income countries and has been the subject of recent research by the OECD (OECD 1995). Literacy is no longer defined merely in terms of a basic threshold of reading ability, but rather literacy is now seen as how adults use written information to function in society and to achieve one's goals, and to develop one's knowledge and potential. The OECD study, which included Canada, Germany, Netherlands, Poland, Sweden, Switzerland, and the United States, and has more recently been replicated in other 8 countries - Chile, Czech Republic, Denmark, Finland, Hungary, Italy, Norway and Slovenia - defined five levels of prose, document, and quantitative literacy (Table 3). The results of the broadened study will be forthcoming in early 2000.

Table 3- Ratios of Labor Force Category by Literacy Level
(1 = lowest prose scale) (Ratios are based on average literacy of population)

Country	Prose Level	Employed	Unemployed	Out of labor market
Canada	Level 1	.69	1.48	1.59
	Level 2	.96	1.44	.55
	Level 3	1.06	.59	.74
	Level 4/5	1.16	.62	.56
Germany	Level 1	.05	.79	1.06
	Level 2	.97	1.18	.29
	Level 3	1.06	.67	.75
	Level 4/5	1.14	.33	.66
Netherlands	Level 1	.66	2.16	1.72
	Level 2	.88	1.53	1.29
	Level 3	1.10	.64	.78
	Level 4/5	1.17	.16	.55
Poland	Level 1	.92	1.52	1.09
	Level 2	1.03	.74	1.00
	Level 3	1.04	.42	.84
	Level 4/5	1.12	.07	.45
Sweden	Level 1	.73	3.41	1.81
	Level 2	.96	1.82	1.05
	Level 3	1.03	.72	.96
	Level 4/5	1.04	.26	.82
Switzerland (French)	Level 1	.79	2.06	1.21
	Level 2	1.00	1.11	1.22
	Level 3	1.08	.61	.83
	Level 4/5	1.06	.27	.55
Switzerland (German)	Level 1	.78	1.89	1.15
	Level 2	1.06	1.22	1.16
	Level 3	1.06	.51	.85
	Level 4/5	.99	.16	.62
United States	Level 1	.72	1.12	1.68
	Level 2	1.01	1.41	.88
	Level 3	1.05	.85	.91
	Level 4/5	1.17	.61	.60

Source: Derived from OECD and Statistics Canada (1995).

The results of the study reemphasize the correlation between employment and literacy. The key conclusions were that differences in literacy skills do exist across and within nations, literacy skill deficits affect large proportions of the entire adult population, are strongly correlated with life chances, are not necessarily synonymous with education attainments, need to be maintained and strengthened through regular use, and adults with low literacy levels do not usually acknowledge or recognize they have a problem.

2.5 *What is the role of ACE in civics education?* Developing knowledge of the key elements of a civil society cannot be relegated only to the initial school system, particularly in countries which are going through rapid political changes (e.g. Albania, Hong Kong), and which are in post-conflict situations (e.g. Bosnia, Kosovo, East Timor). Political stability is a rarely discussed outcome of education. Yet economic, political and social stability are primary ingredients of market growth and education can play a role. Instability adds risk to investment. Marginalized people can be "stabilized " through force only in short-time horizons. Ultimately, stable environments depend on the support and participation of the people. Fostering long-term stability through education requires educational outcomes which enhance participation, voice, and empowerment of the poor (Lynn 1997). Sweden, through the learning circles for rural citizens, directly addressed this issue in the early 1900's; today, in the slums in Manila, ACE programs include specific civil society elements; and Slovenia has adapted the Swedish "community learning circles" in support of its quest to develop a learning society within a democratic market economy. Such initiatives are also supported by civil society organizations such as CIVICUS, which have as their central agenda to promote civil society as a legitimate and effective partner alongside the state and market. The 1999 UNESCO Colloquium on Education in the 50 Plus years emphasized the role of older adults in civic participation and social contribution (see paragraph 2.3), and defined a number of ACE strategies to facilitate such activities (UNESCO 1999).

2.6 *What is the role of ACE in development education?* This is another facet of ACE, which is related to, but broader than, civics education and includes raising the awareness of citizens about the impact of development on their environment and personal enrichment, including assisting older adults make transition to retirement (see para. 2.3). The 1992 Earth Summit in Rio de Janeiro, the World Summit on Social Development in Copenhagen, the World Conference on Women in Beijing, and Habitat II in Istanbul raised many issues about development. In January 1997, development education was the subject of a Conference of the Asian South Pacific Bureau of Adult Education (ASPBAE) in Korea. Development is linked to the environment, civil society, poverty, and economic issues and is an important issue in middle income as well as upper income countries. What type of development do citizens support in and outside their country, what does globalization mean, how do world trends affect individuals, what is the impact of development on the environment, what type of foreign aid do citizens support, are among a few of the questions being raised. The meaning of the phrase, "think globally, act locally" will have to be learned, and many institutions including Non-Governmental Organizations (NGOs) are actively working on this facet of ACE. For example, Japan has a development education council and Korea has a well-developed community education movement. Such activities address community and country development issues as well as personal development, and help ensure society values and supports personal enrichment and development as an essential experience of being human.

2.7 *What is the role of ACE in career and vocational education and training?* Previous paragraphs have noted the importance of continued skill development to address changes in the workplace. There is a fear in some quarters that technology will destroy jobs. But data does not support this conclusion. Instead technological progress has changed jobs in three key ways: it has reduced the number of jobs in production of goods relative to services, it has increased the relative importance of high skill occupations within sectors, and it has broadened skills within occupations. Key conclusions reached by individuals studying the linkages between human capital and employment indicate that people with more education are the most likely to find employment and to receive in-service training from their employers. ACE plays a vital role in development of these skills through on-job - institutional – and combined training programs, for a variety of clients ranging from first time job seekers, to the employed, the unemployed and individuals who have dropped out of the workforce, to older workers.

2.8 *How are initial and continuing education activities linked?* The two activities may occur in different settings and at different times in the lifetime of an individual. Initial education often occurs in formal institutional settings, both in compulsory and tertiary education. ACE occurs in a wider variety of settings as discussed later in this paper (para. 5.1). A key issue that needs to be addressed is how to facilitate articulation and linkages between the two activities that occur at different times during the lifetime of a citizen. Some countries have, and others are establishing, frameworks for such articulation (e.g. the U.S. and Korea) while in others such articulation is very weak (e.g. Chile). If articulation is weak then individuals and institutions may waste valuable resources in duplicating initial and ACE activities, and the mobility of individuals in the workforce may be reduced, particularly if continuing education is not recognized by initial education institutions which often control certification and licensing activities.

2.9 *What is the linkage between ACE and non-formal education?* In some countries there are "non-formal education directorates" within Ministries of Education to address ACE. But the title of "non-formal" education is being questioned in some countries. The Turkish Ministry of National Education has just changed the name of the non-formal directorate to adult education. Most upper income countries do not have non-formal education directorates. The concern is that the concept that some education is "formal" and some is "non-formal" is at cross-purposes with the concept of lifelong learning, where "formal credits" can and should be obtained from a variety of institutional and non-institutional programs (see previous paragraph). In addition, the term "non-formal" often connotes short-term and sometimes lower quality education. Finally, non-formal sometimes carries the connotation that learning is not delivered by formal institutions, which is often incorrect, and again contrary to the concept of lifelong learning.

2.10 *In summary,* ACE forms an essential link and ingredient in the overall framework of lifelong learning. ACE involves the belief in the intrinsic value of education and learning, the goal of universal access to learning opportunities and the recognition of the importance of initial and continuing learning in diverse settings (Hasan 1996). Countries need to examine the needs using a broad definition of ACE, and provide leadership to ensure that needs are appropriately governed, administered, financed, delivered, and evaluated.

III. Governance and Administration

3.1 The governance and administration of ACE reflects a multiplicity of objectives as described in previous paragraphs, multiple clientele and stakeholders, and organizations that deliver services. Policy development is within the realm of governance, and implementation of policy is in the realm of administration. A continuum emerges when one examines how ACE is governed in various countries. On one end of the continuum is the approach of placing one institution or agency "in-charge" (e.g. The Ministry of National Education in Turkey). Unfortunately this does not usually result in the provision of a broad range of services to a broad range of clientele. On the other end of the continuum is the "free trade" approach in which there is little or no leadership from the Government (e.g. Chile). This can result in a proliferation of agencies and institutions which often results in duplication of services, lack of articulation, and gaps in services. ACE is not a "system" like initial education and higher education, but rather a combination policies and services that, to be effective and efficient, need to operate within a broad framework developed with input from key stakeholders to ensure minimum quality, access, and equity. As such the best approach to governance may be somewhere in the middle of the previously mentioned "continuum" with an emphasis on involvement of key stakeholders and evaluation of outcomes (see Section VI, page 27).

3.2 *Who are the clients and stakeholders?* Clients can include: (a) youth, and others who are past compulsory school age but who may need additional skills and knowledge to function in a modern society and enter the labor market; (b) individuals already in the workforce who may want to add skills and knowledge to meet changing job requirements and/or move up the career ladder; (c) the unemployed and discouraged workers, some of whom are structurally unemployed and need to change their human capital to re-enter the labor market; and (d) older and retired citizens, and other individuals who need education opportunities to help them adjust to changing life roles and/or leisure activities. Key stakeholders include the individuals listed above, employers which are concerned about the productivity of their workforce, the Government as the representative of citizens as a whole, labor representatives, and the civil society at large. Each of these stakeholders will have interests in different aspects of ACE.

3.3 *What are the alternatives for governing AC?* One model is to allow different government ministries to deal with different aspects as is the case in the Philippines (e.g. Ministry of Education, Ministry of Health, Ministry of Natural Resources, Ministry of Labor, etc.). A second alternative is to let the free market work and have very little governance and administration, as is the case in Chile although the Ministry of Labor and Education do play some role in financing selected programs. A third alternative is to let the free market work, but provide professional leadership through ACE associations. An example of this is the UK where the National Institute for Adult and Continuing Education (NIACE) provides considerable national leadership for development of ACE and lifelong learning without formal governance and/or administrative responsibilities. It should be noted that there is an international network of ACE professional associations. A fourth alternative is to establish a formal government-led body, consisting of representatives of the social partners, which provides leadership to the field but may not directly administer ongoing services. Examples include Slovenia, which has started such an organization, and Sweden, which has recently established a National Commission to

review ACE and Lifelong Learning polices. A derivative of this approach are the tripartite National Training Boards which are often developed to govern and administer adult training programs. There are many examples of these organizations including the Malaysian Human Development Fund and the Hungarian National Training Board.

Box 1- Model Practice: Alternatives for Governing ACE

NIACE, the National Institute for Adult Continuing Education in the UK, represents an effective alternative for governing ACE by relying on the free market and at the same time providing professional leadership through ACE associations. NIACE is a registered charity and a company limited by guarantee under English law, without formal governance or administrative responsibilities. It is a membership organization, with a network of individual members and more than 200 corporate members across the full range of providers, policy makers and users of adult learning opportunities. By providing information services to individuals and organizations and designing and implementing research projects, this institution can serve as a model for the Bank's clients which need a method of communicating about and between the diverse actors involved in adult and continuing education.

The **Slovene Adult Education Center** - modeled after parallel institutions in the UK (NIACE) and in Denmark - was established by the Government of Slovenia in 1991 in order to promote the development of adult education in the country. It is a non-government and non-profit organization with a governing body composed of the various ministries and delivery institutions, plus the Chamber of Commerce. The annual program of work is adopted by the Government of Slovenia and the programs are financed 60% from the Government and 40% by grants and contracts. The Center is not intended as a primary delivery agent, but rather as an infrastructure to assist in preparing a professional foundation for the development of ACE. Moreover, it maintains an information system on adult education, organizes training for adult education staff, undertakes research and development work, and develops international cooperation programs.

The **Swedish National Commission on ACE** represents another example of alternative governing of ACE through a formal government-supported entity constituted of representatives of the social partners. While providing national leadership for developing ACE and lifelong learning, the Commission - established by the Swedish government – reviews ACE and lifelong learning policies instead of directly administer ongoing services.

An alternative approach to the Slovene and Swedish systems is the one conceived in Hungary where the **Hungarian National Training Board**, which is a tripartite body established for the reconciliation of domestic training interests, plays an important role in the government and administration of the Hungarian vocational training as well as in the development of a network of Regional Human Resource Development Centers across the country.

3.4 *What administrative alternatives are used?* Administrative models are closely tied to governance and financing models as well as the size, administrative structure, and traditions of the country (e.g. what works in Singapore or Korea may not work in the US or Brazil). The first "government driven" policy model described in paragraph 3.3 usually results in parallel government administration of programs, either directly or via regional government authorities and/or institutions controlled by government agencies. However, where the "governance and policy development" is by professional associations or commissions, administration is often decentralized to local authorities and local service providers. When this happens, the Government often plays a more limited,

but important, role in coordinating the accreditation and licensing local services providers which are then authorized to receive public funds to deliver ACE services.

3.5 Whatever the governance and administrative model selected, there are several key issues that need to be addressed if a comprehensive system of ACE is to be developed in order to serve the needs of different clients and stakeholders.

- *Equity*: As alluded to in previous paragraphs, one of the single most distinguishing characteristics of the poor is lack of education and training (Friedman 1989). Those who do not have the skills and knowledge to compete in society are the most threatened with unemployment in times of economic contraction, and cannot fulfil personal ambitions or make a full contribution to the economy. Such individuals often become increasingly disenfranchised, which can affect political as well as personal stability. These individuals are sometimes difficult to reach because of social, cultural, and geographic constraints. A number of countries such as the UK, Brazil, and Sweden are addressing this issue with specific policy and program initiatives that are partially publicly financed.

Box 2- Model Practice: The Needs of the Disenfranchised

The UK Green Paper on ACE - *The Learning Age: A Renaissance for a New Britain* – was presented to the British Parliament in 1998. In the aims of its designers, the Green Paper sets out for consultation how learning throughout life will build human capital by encouraging the acquisition of knowledge and skills and emphasizing creativity and imagination. As its main objective, the Paper calls for the entry and reentry of disenfranchised adults in the learning process at every point in their lives, whatever their previous experience at school. In order to achieve this result, two main initiatives are pointed out:

1. individual learning accounts which enable men and women to take responsibility for their own learning with support from both the Government and Employers; and
2. the University for Industry which offers access to a learning network to help people deepen their knowledge, update their skills and gain new ones.

In addition, the Paper propose to double help for basic literacy and numeracy skills amongst adults; expand further and higher education to provide for an extra 500,000 by 2002; widen participation in and access to learning both in further, higher, adult and community education; raise standards across teaching and learning after the age of 16; set and publish clear targets for skills and qualifications; work with business, employees and trade unions to support and develop skills in the workplace; and build an easy-to-understand qualifications system.
The Green Paper was generally welcomed by key national organizations, including the Confederation of British Industry, the National Advisory Council for Education and Training Targets (NACETT), the National Organization for Adult Learning (NIACE), the Trades Union Congress (TUC), and the Basic Skills Agency (BSA), which expressed their willingness to be involved in this undertaking.
Source: UK Government (1998). *The Learning Age: A Renaissance for a New Britain*, Green Paper.

- *Access*: Equity and access are directly linked, but the best-laid plans for equity can be thwarted by lack of access. ACE programs have different objectives, different clients, and must operate in very flexible and user friendly environments, particularly if they are to address the needs of the disenfranchised. This issue is developed in more details in the Section IV of this paper, and is a central administrative issue.

- *Career progression and human development*: A central goal of ACE and lifelong learning is that an individual must be able to gain access to skills and knowledge that will allow him or her to develop to his/her full potential at different life stages. Access, and recognition of these skills for career progression purposes, is a key to achieving this goal. As such, it is critical that there is a framework of standards that are objective, based on real life requirements, can be measured, and can form the basis of articulation agreements between education and training institutions as well as certify life experiences. Often there is no national framework for such certification and articulation, and as a result the individual suffers and must repeat education and training programs, and may not be able to gain credit for life experience. Some countries have developed national occupational standards and certification systems (e.g. the UK, Germany, Canada), others are rapidly putting them in-place (e.g. Turkey, Romania) while others have yet to begin (e.g. Chile, Brazil). Paragraph 5.7 includes a more comprehensive discussion of this issue.

Box 3- Model Practice: Occupational Standards and Certification Systems

The Turkish MSK Occupational Standard Commission is a tripartite body representing the state, employers and employees of Turkey. The Commission was established in 1993 within the Employment and Training Project, based on the Occupational Standards National Protocol and the Loan Agreement between the Turkish Government and the World Bank. Its main objective is to establish the occupational standards, testing and certification system in Turkey. MSK member institutions, representing employers, employees and the state are: the Ministry of Education, the Ministry of Labor and Social Security, the Turkish Employment Organization, the State Planning Organization, the Confederation of Turkish Craftsmen and Tradesmen, the Turkish Confederation of Employer Associations, the Union of Chambers of Commerce and Industry, the Confederation of Turkish Trade Unions, the Foundation for the Promotion of Vocational Training and Small Industries. The objectives of "Occupational Standards, Testing and Certification" component can be summarized under three major headings: to prepare occupational standards for occupations, to develop related knowledge and performance test item data banks, and to establish a "Testing and Certification System" recognized throughout the labor market. Draft legislation has been prepared to convert the MSK into an autonomous institution under the name "Turkish Occupational Standards Institution."

The UK Qualifications and Curriculum Authority (QCA) came into being on 1997. The new organization brings together the work of the National Council for Vocational Qualifications (NCVQ) and the School Curriculum and Assessment Authority (SCAA) with additional powers and duties, which gives it an overview of curriculum, assessment and qualifications across the whole of education and training, from pre-school to higher vocational levels. QCA is a non-departmental government body under the Department for Education and Employment. In addition to the government, QCA represents schools, colleges and training providers; regional bodies and professional associations; parents and school governors; other national bodies in education and awarding bodies, which offer a wide range of qualifications.
Over half of all the vocational qualifications awarded in the UK are National Vocational Qualifications (NVQs) which are based on occupational standards and include knowledge requirements as part of them. They recognize candidates' competence to apply skills and knowledge in the workplace to the recognized national occupational standard. They are offered at five levels and are available in several broad occupational areas.

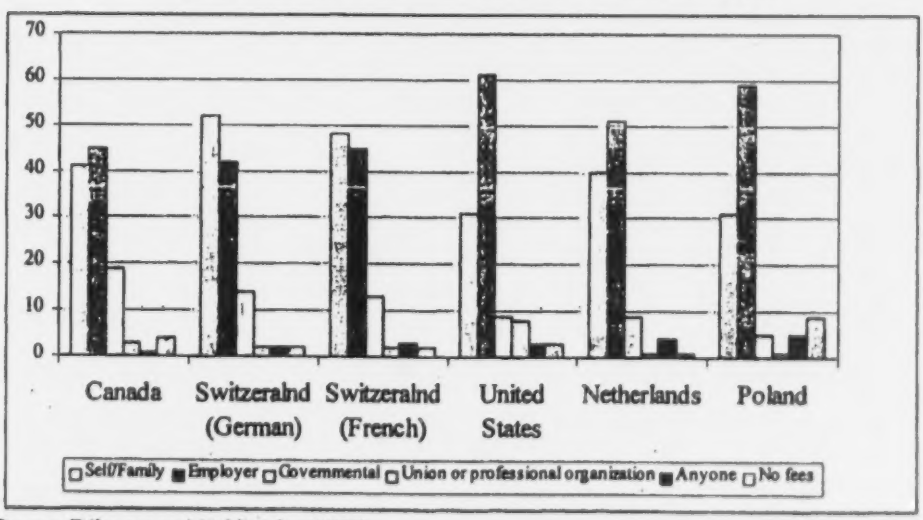
3.6 Policy leadership is a key to development of ACE and lifelong learning. This can take several forms, but must address several central themes if ACE is to serve its many stakeholders. At a minimum, key stakeholders need to be involved in developing ACE policy. Having different entities or government agencies unilaterally and individually develop ACE policy is a second best alternative as this approach does not ensure that articulation agreements will emerge and that priorities and financing will reflect demand.

IV. Financing

4.1 Financing of ACE, like governance and administration, is a multifaceted activity that must address the different objectives and clientele involved in ACE. The setting for financing is complex, more so than for initial education and training, and must: (a) provide mechanisms that allow private, public, and NGO services providers access to funds; (b) provide both development/investment and recurrent funding, (c) be able to *support time- and performance-based reimbursement schemes;* and *(d)* address access and equity issues by prioritizing and targeting funding for special programs and clients when needed (e.g. the disenfranchised, the poor). ACE programs often operate in a resource-constrained environment, because the impact of ACE is sometimes not recognized in either the public or private sectors. As in most education finance discussions, the issue of public vs. private financing emerges. The free market approach argues that that those that reap the benefits (e.g. adults) should pay the entire costs of their involvement in ACE. This argument is not universally accepted, because employers and society at large do benefit from investments in ACE, as well as individuals. But the argument can be persuasive when public funds are very limited and the demand for ACE is high. Unfortunately "markets" do fail, and in such instances the individuals that suffer the most, unless special targeted funds are made available, are the disenfranchised and the poor. Thus in reality what is happening in most countries is a blend of public and private financing which varies greatly between countries and different ACE programs.

4.2 *What are the sources of financing and how are they used in ACE programs?* Sources of financing include the government, individuals, enterprises, civil society, as well as international donors. The key to strong program development and delivery of ACE is the use of multiple sources of finance. In general there is a blend of funds for most programs (Figure 3). Basic literacy programs are often financed by the

Figure 3- Participation and Sources of Financial Support



Source: Bélanger and Valdivielso (1997).

government (e.g. the US), abet with limited resources in many cases (e.g. Chile, Philippines), and with some supplemental financing from individuals. Civics and development education are often financed by the civil society and government, with philanthropic organizations being very active in some countries (e.g. Brazil and the Philippines). Career and vocational training is often supported by Government as well as enterprises for initial training, with Government paying the majority of costs for retraining the unemployed, and enterprise the major costs of in-service training. Individuals often invest in all types of ACE, particularly leisure and development education, but in other areas such as foundation and occupational skills the questions of access and equity must be incorporated into financing to support for the disadvantaged.

4.3 *How are vouchers used in ACE?* Vouchers are of increasing interest in many countries as they promote the development of education and training market and they can be used to target government assistance to disadvantaged individuals. Vouchers are seldom direct cash payments to individuals but rather administered so the funds follow "qualifying" individuals who enroll in approved education and training programs. The US Basic Literacy Grants are an example of this approach, as are most retraining program for the unemployed, and the UK learning accounts referenced in Box 2. Evaluations of voucher-driven programs for the unemployed in Hungary - where individuals were allowed to select and enroll in ongoing retraining programs on an individual basis, as opposed to joining a group training program for the unemployed - proved to have significantly greater impact than group trained programs (Fretwell et al. 1999). However, voucher programs can be complex to administer and encounter problems of fraud; they operate best when there is already a well-established network of service providers to whom individuals can go to receive ACE, and special efforts may be necessary to ensure that the most needy individuals are aware of and use the system. If training networks do not exist, they may not appear under a voucher scheme because service providers may be unwilling to invest in developing programs for a very unstable customer basis. Small businesses, which often have difficulty in accessing or operating traditional employee training programs, can also benefit from "vouchers based" payroll levy training activities (see following paragraph). Malaysia and Chile have developed such programs.

4.4 *How are payroll levies used?*. Levies are often used to finance ACE occupational training, but there are instances where they are used to finance civics and development education (e.g. France and Brazil). There are two general approaches. The first entails collecting a payroll tax levy from employers, then a central government or quasi-government agency administers training using funds from the levy. This model has sometimes encountered problems (e.g. Nigeria) because it tends to create large bureaucracies which are self-perpetuating. Some countries have stopped such levies (e.g. UK). An alternative model, which appears to work more effectively, is where the levy is primarily managed by employers. And, if employers document that they have provided training to their employees, then a part of the levy is "forgiven". This type of levy is used in Hungary, France, and Malaysia. Usually, a portion of the levy is retained by a central body to finance development of training materials, special programs, and provision of assistance to small businesses, which have difficulty in making use of payroll levy funds. There are problems even with this latter approach, as companies may not use funds effectively (e.g. management may use the funds for superfluous activities and charge

them to training). And even these levies can still result in development of entrenched bureaucracies. Levies can also drive up the cost of labor (e.g. Brazil has multiple payroll taxes, including training levies, which amount to 80-110% of net wages). There are also questions raised about the net impact of these levies (e.g. do employers really provide more internal training to get their training levy forgiven, or would they have done the training without the levy).

Box 4- Education and Training Levies

In **Malaysia**, one of the major streams for financing training is through a levy on the employees' total payroll. The 1992 Human Resources Development Act instituted a Human Resources Development levy of 1% of the total monthly basic wages or fixed allowances of the employees. The 1992 Act covers every employer, in the manufacturing sector, with more than 50 employees. In addition, employers are required to register with the Human Resources Development Council. Failure in paying the levy or in registering with the Council results in an offense liable to fine or imprisonment. Subsequent emendations to the 1992 Act extended the coverage of the levy. It currently involves employers with a minimum of 10 employees and a paid-up capital of RM2.5 million and above. Furthermore, the levy is also extended to the service sector, including hotels, tour operators, telecommunications, computer services, shipping and freight forwarders, aviation, advertising industries, and the postal service. Malaysian employers that have registered with the Human Resources Development Council and paid the levy, are eligible to apply for training grants. The purpose of this levy is to enable employers to train their workforce by defraying a major portion of the allowable costs of training and therefore can be considered as a cost-sharing effort.

In **France**, according to the 1971 law on education, enterprises with more than 10 employees have to devote 1.5% of gross payroll to training their staff, either internally or by contracting with an external training provider. Enterprises that choose to train their employees manage these actions within the framework of annual or multi-annual training plan. Although employers have competence on training, they must consult personnel representatives. The employers can choose the type of training and designate which employee should attend it. Moreover, training is considered as a professional obligation and the employee cannot refuse it. Enterprises with less than 10 employees must devote 0.25% of gross payroll to vocational training of their employees (Art. L 242-1, Code de la Sécurité Sociale.). This system is considered to have contributed to greatly increase training in enterprises, while at the same time helping ensure equity and access of workers in small enterprises to training. On the other hand, some policy analysts (e.g., OECD) have questioned the impact and note that other countries without the levy systems provide similar level of training. Such systems can be effective in countries which are encouraging employers to start on-job-training.

In **Brazil**, like in many Latin American Countries, the "S-S" organizations (SENAI, SENAC, SEAT, SENAR and SEBRAI) get payroll tax funds to provide training for workers in enterprises and youth apprentices on a 50/50 basis. Although the level of financing is currently under review, the levy is currently about 2.9% of wages, i.e. remarkably larger than the Malaysian and French levies. However, there is concern in some quarters that the "S-S" organizations are over funded, not competitive, contribute to the cost of labor in Brazil, and only serve a narrow range of adults (e.g. those who are employed). Options are being discussed to refine the system in Brazil.

4.5 *Decentralization.* This process can have negative and positive impacts on the financing of ACE. Decentralization can assist local communities in rapidly reacting to the unique needs of ACE in their locality. But, unfortunately, financial resources do not always follow decentralization (e.g. central government agencies give authority to local entities to implement programs, but without the financing or taxing authority to implement them). The Philippines is an example of this problem, in basic and functional literacy education. Many central government Ministries developed model programs, but neither local governments nor NGOs have the resources to implement the programs to any significant degree. A second problem with decentralization is that it may result in a

lack of leadership and priority for ACE, and frameworks for articulation and certification to promote lifelong learning and labor mobility may collapse or not be developed. Therefore, if decentralization for ACE is envisioned, there is a need to maintain some central body to promote development and articulation of programs and, when needed, assist with financing in targeted areas to ensure quality, equity, and access.

4.6 *Do workfare programs affect ACE?* Workfare programs are intended to reduce the Governments financial burden for social assistance payments by encouraging social assistance recipients to return to work. Able-bodied individuals are offered employment and if they refuse without a valid reason then they are taken off social assistance. A number of developed and middle income countries (e.g. US, Hungary, Poland) are experimenting with these programs. This "workfare' concept has ramifications for ACE (e.g. .civics, foundation, and career education and training). If the State demands that a person enters employment, then there is some expectation that the State will also help the individual acquire the necessary social and occupational skills to perform satisfactorily in the workplace. If the State is not willing to finance the needed ACE, or the individual does not have access to the needed ACE, then the individual will be forced into poverty even further. This is not an acceptable outcome of workfare and the ACE system needs to organized and financed in a manner that ensures it can respond in an adequate fashion if called upon to provide services.

V. Delivery

5.1 The delivery of ACE is carried out by a multiplicity of institutions which may deliver one or more types of ACE activities. In theory, these activities should use instructional techniques tailored to adults and non-traditional approaches to learning, as opposed to techniques used for initial training of youth. However, on-site discussions with program administrators and services providers provides evidence that programs are often not designed with the needs of adult learners in mind and as a result many not be as effective as desired. The variation in "place of learning" is exemplified in the following table. The primary service providers for ACE are the workplace and adult training centers (Table 4).

Table 4- Participation and Place of Learning (%)

	Canada	Switzerland (German)	Switzerland (French)	United States	Poland
Elementary or high school	13	3	4	6	8
College campus	12	2	3	16	0
University campus	9	4	8	12	6
Business or commercial school	1	10	12	2	1
At work	22	10	16	29	25
Training center	14	30	29	12	28
Conference center	13	13	12	15	6
At home	5	3	2	2	5
Community center	5	7	4	1	2
Elsewhere	7	18	10	5	18
Number of Institutions in Sample	**2,849**	**914**	**672**	**1,902**	**497**

Source: Bélanger and Valdivielso (1997).

5.2 *What type of service providers are on the market and how do they operate?* Service providers fall into four major categories including public, private, NGO, and employer-based providers. The trend worldwide is away from dominance by purely public providers, which reflects the type of financing shown in Figure 3, and toward public-private partnerships, private, and NGO providers. But the degree to which this shift is taking place depends to a great deal on what type of ACE is being delivered (e.g. literacy, civics, occupational skills).

5.3 *Public provision.* Public service providers remain a major force in ACE, and are extensively involved in the provision of basic literacy and foundation skills as well as occupational training. This is sometimes accomplished via existing primary and secondary school networks, but also in dedicated adult education centers. However, in a number of many countries, ACE public institutions providers are being placed "on the market". For example, in Sweden, the County Komvux community education centers now have to compete with private providers for public financing, as does the network of Vocational Training Centers (AMU). The same approach was taken in the UK several years ago with the Manpower Training Centers, which soon went out of business. Public service providers increasingly work as quasi-private organizations, compete for both private and public resources, and are often established as foundations with governing

bodies composed of key stakeholders (e.g. the Hungary Regional Human Resource Development Centers).

Box 5- Model Practice: ACE Delivery

The American Association of Community Colleges (AACC) is the national organization of two-year associate degree granting institutions. Established in 1920, AACC works with other higher education associations, the federal government, Congress, and other national associations from both the public and private sectors to promote the goals of community colleges and higher education. In 1997, the network of community colleges was present in every state and accounted for some 1,132 institutions, of which 995 were public and 137 private, enrolling 10.4 million students, i.e. 44% of all US undergraduates, and awarding 482,329 associate of arts degrees and nearly 200,000 2-year certificates. Sources of revenues for community colleges come from state funds (40%), tuition and fees (20%), local funds (17%), federal funds (13%) and other funds (10%). The public community colleges are governed by over 600 boards of trustees. In 27 states, public 2-year colleges are governed by local boards of trustees, whereas state boards govern in 17 states and 5 states have mixed forms of state boards governing some colleges and local boards governing others. The colleges provides flexible education and training in a broad variety of fields including community/leisure education, civics education, basic and foundation skill, career and vocational education, and customized quick start training for enterprises. Articulation agreements with secondary schools and higher education institutions are the norm, rather than the exception. The Office of the Community College Liaison, in cooperation with the Office of Vocational and Adult Education (OVAE) at the U.S. Department of Education is developing a new discretionary grant program to be administered by OVAE. The program, Community Technology Centers (CTC), is designed to establish and promote technology centers in economically distressed urban and rural areas. The purpose of the Community Technology Centers program is to promote the development of model programs that demonstrate the educational effectiveness of technology in urban and rural areas and economically distressed communities and will be available to children and adults of all ages.

In Malaysia, the Penang Skills Development Center is the result of the cooperation of state agencies and private industries, mostly multinational corporations. It is a non-profit society but it is administered on a commercial basis. Although initiated by the State Government through Penang Development Corporation (PDC) and aided by academia, management, expertise and administration is left to the industry. Participating companies pool their resources together to help plan, design and conduct an extensive range of training programs directly relevant to immediate and forecasted needs. The PSDC's mission is to share resources amongst the 4 Free Trade Zones and 4 Industrial Estates in Penang with a total of 650 factories employing more than 170,000 workers, by providing training and educational programs in support of operational requirements, as well as to keep abreast of technological progress. Training courses offered by this center include technical skills, manufacturing skills, management skills and continuing education. Most of its programs have been awarded ATP status (Approved Training Program) by the Human Resource Development Center and are financed by several of the Human Resources Development Fund's schemes (PERLA, SBL, etc.).

5.4 *Private provision.* Private education and training agencies are an increasing force in ACE. They tend to organize career and vocational education, but also work in the area of basic literacy education. The private sector often focuses on niche markets, where there are limited capital investment requirements and the greatest return possible. Development of private alternatives in middle income countries is sometimes inhibited by under-capitalization, competition from public and quasi-public agencies which have been publicly capitalized, low levels of unit cost funding from public agencies, and difficult licensing requirements. The advent of new educational technologies has enabled the private sector to move into new fields and provide flexible services. Government

need to ensure regulations are in place to allow private and NGO services providers can compete on a level playing field with public institutions which have been publicly capitalized. This is being done in several places where private and public providers have access to investment capital from World Bank loans (e.g. Poland, Hungary). Chile is an example of a country which has promoted the private sector extensively and has privatized almost all tertiary level institutions. But, on-site visits confirm that this appears to have been done without a framework for articulation and investment and, as a result, there is very little opportunity for credit accumulation by clients between programs at different institutions, and the quality of ACE is often not very good. The private sector, like the public sector, needs to operate within a framework that provides some assurances of quality and articulation between programs (see para. 5.7 for a more complete discussion of this issue). Increases in private provision can also exacerbate problems of access and equity. One approach to help overcome these problems is to provide voucher credit systems for disadvantaged persons, as is being done in Chile - particularly for literacy education and for services to the unemployed and disenfranchised.

5.5 *Non Government Organizations.* NGOs, or not-for-profit agencies, tend to focus on civics/development education and literacy programs with limited involvement in career and vocational training. The focus tends to vary as much as does the definition of NGO, which can include organizations that primarily help only their members (e.g. unions), to those which help others outside their membership (e.g. some religious and most community organizations). Given this diversity, the focus of NGOs in ACE is radically different between countries, and so is the attitude of governments toward NGOs. In some countries, registration as a non-profit agency is difficult and laws are restrictive. Although not universally shared by all NGOs, the mission statement of CIVICUS is perhaps indicative of the thrust of these organizations.

Box 6- Model Practice: NGOs for ACE

CIVICUS - one of the largest NGOs both in terms of members and activities - is an international alliance dedicated to strengthening citizen action and civil society throughout the world. Since its inception in 1994, its members have included non-governmental organizations, private charities, corporate philanthropic programs, research institutions, and individuals from over 60 countries. The organization provides program information and networking for civil society organizations (CSOs) around the world and has special projects promoting the vitality and viability of voluntary citizen action. CIVICUS seeks to fulfill its mission by serving as a global alliance of citizens and their organizations, to help advance regional and national agendas of common initiatives; to strengthen the capacity of civil society; to develop a more supportive environment of laws, policies and regulations; to strengthen tri-sectoral partnerships; and to develop a permanent, self-sustaining and creative resource mechanisms. As shown by the profiles of civil societies in 60 countries listed in the New Atlas by CIVICUS', programs include: promoting enabling legislative and fiscal environments; promoting resource mobilization opportunities for civil society organizations; mobilizing civil society participation around poverty eradication initiatives; and promoting women and youth participation in civil society. (continues...)

(...continued) The Salesians of Don Bosco is a Catholic organization committed to the education of the poor around the world. The Salesians represent the group which Don Bosco – the founder - established last century to launch new initiatives for the education of youth. Other groups include: Daughters of Mary Help of Christians, Salesian Cooperators, Don Bosco Alumni, Don Bosco Volunteers. All the groups within Don Bosco's Spiritual Family share his educational method which resulted in the creation of schools, oratories and youth centers, technical and professional training centers, parishes, foreign missions, and activities in the realm of mass media and social communications both in the developing and developed world. (Continues...) Many of Don Bosco's initiatives take place in the public sector and operate according to civil structures that allow them public recognition. Today in Italy, where the organization has its headquarter, there are several public agencies that operate under Salesian auspices: a national organization for Salesian professional training centers called CNOS (Centro Nazionale Opere Salesiane), and a similar organization for works organized by the Daughters of Mary Help of Christians called CIOFS; both have civil status. There are also a number of national associations in Italy: CNOS-Scuola (an association of teachers and administrators), PGS (Salesian Sports Association for Youth and Young Adults), TGS (Youth and Social Tourism Association), VIS (Volunteers for International Development).

5.6 *Employer based programs*: Employers are primarily involved in organization and delivery of occupational training. However, employer-based literacy, foundation, and civics programs are found in some countries (e.g. Brazil). The level of employer involvement in ACE is difficult to quantify. Information on employer involvement in ACE tends to be better when payroll tax levies are operating, but there is a considerable body of other research on employer-based ACE. Some of this has already been alluded to in Section I of this paper, but the following points are noteworthy and are based on OECD data (Berryman 1997). Many workers receive some training from their employers, with or without training levies. Employers tend to invest most extensively in training their best educated and trained employees, whereas low-income employees are more poorly educated and receive little training from employers (Table 5).

Table 5- Participation in ACE by Level of Initial Educational Attainment (%)

Country	Primary	Lower sec.	Upper sec.	Non-uni. tert.	University	Total participation
Sweden	27.0	46.7	52.8	66.6	70.4	52.5
New Zealand	6.8	37.8	52.0	60.4	71.5	47.5
Switzerland G	6.7	22.9	48.0	59.1	63.4	44.7
UK	23.4	34.2	53.2	60.7	73.7	43.9
United States	10.3	21.0	30.7	54.9	64.2	39.7
Australia	8.8	27.0	50.6	39.4	60.8	38.8
Canada	15.4	25.6	33.9	51.8	59.5	37.7
Netherlands	17.2	29.0	44.5	-	51.4	37.4
Switzerland F	9.5	15.0	35.7	51.0	51.0	33.7
Ireland	8.6	17.6	29.4	44.1	51.0	24.3
Belgium	4.6	13.3	22.0	37.8	45.6	21.2
Poland	2.7	9.9	20.6	32.5	34.3	13.9

Source: OECD and Human Resources Canada (1997).

Employers tend to invest in younger but experienced workers, and, as one would expect, more training occurs in sectors which are growing. Small firms invest less in training than larger firms, and trained workers are less likely to be laid off or to quit their jobs. An interesting phenomena is developing in countries where employers are outsourcing training, in the same way they are outsourcing other services, so they do not have to maintain internal training departments and staff. This is resulting in a new "demand" for training from public and private training agencies and it is not unusual, from Hungary to the United States, to find public, quasi public, and private training agencies that provide contracted customized education and training services to enterprises. The same activity can be found in other countries. For example, the quasi-public Hungarian Regional Labor Development Centers obtain about one third of their revenue from customized training. One Center provides training for Ford Motor Company mechanics throughout all of Central and Eastern Europe, in a laboratory completely furnished by Ford which the Center uses for general mechanical training when not booked by Ford. This type of activity is also highly developed in the American Community College System and is directly linked to community economic development initiatives.

Box 7- Model Practice: Training Centers

Created in 1942, SENAI is the National Industrial Training Service, one of the institutes coordinated by the National Confederation of Industry, in Brazil. Its role in modernizing the Brazilian production sector is carried out through training actions and a variety of services. In around fifty years of activity, SENAI has trained over 22 million workers. SENAI includes a network of 966 centers and operating units which ensure a potential institutional presence in over 3 thousands cities and villages in Brazil. In 1995, SENAI offered about one thousand job-oriented courses covering 25 industrial areas. SENAI activities focus on manpower training, technological information, laboratory trials and occupational certification. Its centers prepare human resources, supply technological information and support industries. SENAI has international technical cooperation agreements in areas such as the environment, teaching techniques, industrial automation, food processing and competitiveness enhancement for small businesses.

5.7 *How can ACE learning outcomes linked given the multiplicity of objectives and service providers?* Previous paragraphs (3.5) have already referred to the need to have some central leadership, with representatives of key stakeholders, to promote quality, coordination, and articulation. There are specific technical issues that need to be addressed that are of particular concern in basic/foundation knowledge and occupational skills.

- *Standards:* Clear definition of standards, and related testing and certification programs, particularly for: occupational knowledge and skills and, basic/foundation education skills, is a critical first step in moving toward competency-based, as opposed to time-based, ACE. This can also help quantify and ease the development of articulation agreements between initial and continuing education and training institutions, and set the stage for common certification programs that can also recognize skills developed through life experiences. The OECD has several activities in this field (OECD 1996), has developed literacy standards and indicators, and many developed and MIC countries are developing and have in-place national occupational standards and certification programs (e.g. Philippines, Malaysia, UK, Germany,

Romania, Turkey). There are several alternatives for developing these system, and specific political, administrative, and technical issues must be addressed during development (Fretwell, 2000).

- *Articulation.* Recognition of education and training delivered by different service providers is a crucial element of ACE. If different institutions refuse to recognize credits, individuals will be forced to redo education and training with the resultant waste of human capital and resources. This is a major issue in many middle income countries (e.g. Chile), but one that some MICs (e.g. Korea) and many upper income countries (e.g. U.S., New Zealand) are already addressing.

- *Institutional accreditation.* This needs to include reviews of facilities, programs, staff, and administration which are important elements in establishing standard benchmarks for program quality. Accreditation programs do not replace evaluation of competencies gained by individual program participants, but can provide financing agencies and clients with information to evaluate the possible quality of programs offered.

- *Occupational Skill banks.* This is an emerging trend in ACE and lifelong learning with regard to occupational. The concept is that an individual can maintain an individual dossier, or skill and knowledge bank, through his/her life span and can be compiled from initial education, as well as from continuing ACE activities including certification of skills learned through life experiences. Such approaches have been operating in some countries (e.g. US) for some time and have included competency testing for course credit, and challenge of training programs based on work experience . These are now being formalized in other countries such as the UK, Korea, and the Philippines (see Box 8 following).

- *Occupational Licensing.* This is an issue that is related to competency testing and recognition of skills. Unfortunately, licensing procedures and requirements are sometimes influenced by factors that have little to do with actual occupational competency (e.g. a desire by licensing boards to restrict entry into a profession to protect those already working), or are backward, outdated and based on historical ideas. Countries need to look at these issues in relation to ACE development. There may also be ramifications for labor mobility if occupational licenses are not recognized by neighboring countries.

Box 8- Model Practice: Skill Bank Systems

In Korea, Credit Bank System (CBS) aims to provide all citizens with greater access to a variety of educational opportunities. CBS was proposed by the Presidential Commission on Education Reform in 1995 as a way to realize the lifelong learning society. It seeks to innovate, diversify and maximize the educational opportunities for both students and adults. CBS recognizes diverse learning experiences gained not only in-school but also out-of-school. When the learner accumulates the necessary CBS-approved credits, he/she can be awarded a degree from Credit Bank. In accordance with its mandate, Credit Bank System accredits a variety of educational programs, with the goal of guaranteeing open and flexible access to good quality of continuing education. (continues...).

(...continued) CBS also grants recognition to learners' diverse learning experiences, including prior course credits and other diverse forms of learning. Credits are acquired primarily through educational and job training institutions, part-time enrollment, certificate acquisition, and subjects passed by the Bachelor's Degree Exam. Non-formal educational institutions are formally evaluated and, if successful, given approval as a CBS accredited institution offering accredited programs and courses, which can be counted as university or college equivalent credits. These institutions are evaluated on the basis of instructors, facilities and curriculum.

5.8 *ACE professional development.* Development of ACE teachers and administrators, and knowledge of adult education research and theory, is not well advanced in many MICs. Anecdotal evidence emerging from site-visits and discussions with professionals familiar with MICs indicates that related faculties do not exist in many MIC higher education institutions. However, there is a considerable body of research that indicates that adults learn differently from youth, and aside from the social problems of placing adults in a youth training environment, there is a need to educate ACE professionals about the key issues involved. For example, most cognitive skills peak in early or middle adulthood, and decline after 50 years of age, age related changes are not uniform across all cognitive skills, the existence of generational differences in intellectual abilities has been demonstrated, personality traits reflect generational but not age differences, and there are subtle changes in self concept as one ages (Schaie 1996). All too often, public school teachers are asked to provide evening and day courses to adults, and when they do they often use the same techniques and materials that they use with youth. Non-teachers are often hired to instruct adults, without any specialized training. Key features of education for adults (andragogy), as opposed to education for youth (pedagogy), include the idea that an adult's self-concept moves from a dependent human toward being a self-directing personality; adults have a growing reservoir of experience that becomes an increasing resource for learning; adult readiness to learn is related to his or her social roles, and orientation to learning shifts from subject-centeredness to problem-centeredness (Knowles 1970).

5.9 *Delivery of ACE instruction.* Adults, particularly those who are employed and who have family responsibilities, need programs that can be delivered at flexible times (e.g. evenings, days, weekends), with different media (e.g. print, media, correspondence, on-site), with flexible entry and exit points that recognize prior learning and different learning speeds, and in settings that reflect adult norms. Evidence from site-visits indicates that many of these parameters are missing from institutions that focus on initial education and training, and if initial public school administrative procedures, facilities, and staff are overlaid on ACE, the effectiveness of ACE will be muted. In addition, many young and middle aged adults, particularly the disenfranchised, may have had negative experiences in initial public school settings and asking them to return to this setting for ACE may be counter-productive. If it is necessary to use public school facilities to support ACE, as it may be in a resource-constrained environment, every effort should be made to ensure that programs reflect the needs of adults by using staff who have special training, adult training materials, and schedules. Unfortunately, experience indicates that this is often not the case in MICs.

5.10 *Distance learning and educational technology.* Emerging educational technologies appear to hold special promise for ACE. Surprisingly, the use of this technology in ACE is rather limited, even in developed countries, a trend noted by several writers in the field and confirmed by site visits during the study. However, in 1989, Merriam and Cunningham inserted a major chapter on this issue in their *Handbook of Adult and Continuing Education* (Merriam and Cunningham 1989). The use of distance learning and education can directly address some of the previously described issues revolving around adult learning theory (e.g. the importance of self-directed learning) and non-traditional delivery (e.g. flexible entry and exit, flexible time of delivery). However, there are notable examples of where distance learning is being used, ranging from the Open University in the UK to the extensive use of Satellite TV in Brazil.

Box 9- Model Practice: Distance Learning

The UK Open University represents a successful example of distance learning. Its 'open entry' policy focuses on providing a flexible second chance to those who want to pursue a higher education degree. Created in 1971, the Open University is the UK's largest university, with over 200,000 students and customers in 1997/98. The OU represents 21% of all part-time higher education students in the UK. The University is ranked amongst the top UK universities for the quality of its teaching. Courses are available throughout Europe and, by means of partnership agreements with other institutions, in many other parts of the world. Over 24,000 learners are studying OU courses outside the UK. Two thirds of students are aged between 25 and 44, but students can enter at the age of 18. Nearly all OU students are part-time and about 70% of undergraduate students remain in full-time employment throughout their studies. More than 40,000 students study interactively on-line with the OU, at home and in the workplace, with multi-media teaching supports such as CD-ROMs and video-discs.

In Brazil, distance learning plays an important role in the delivery of Adult Continuing Education and there are several major television learning networks. The Ministry of Education sponsors a television channel which is used for distributing basic education programs as well as providing in-service training to teachers. The Robert Marinho Foundation sponsors Globus 2000, a TV satellite network, which broadcasts the Telecourse programs operated by the 'S-S' organizations. The latter transmits programs developed by enterprise organizations into homes and enterprises and is used extensively to bolster basic and vocational training throughout the country. These telecourses are run in enterprises with trained facilitators and are supplemented with written materials and classroom discussion. In addition, SENAI is experimenting with use of the Internet under a special program called CIET in Rio. The program, started in 1994, links enterprises, technical libraries, technical training and development centers to improve quality, productivity and innovation in the industrial sector. The project uses a combination of satellite, landline and radio and is being developed in recognition that while 90% of households have TVs, few have computers and only 8 out of 1,000 have telephones.

5.11 In examining distance learning it is useful to categorize the types of educational technology by media type and application (two way or one way) and examine some of the practical problems with implementation (Table 6). There is also a considerable volume of research on the impact of the use of distance learning and educational technology, much of which indicates that there is no significant difference with conventional classroom instruction. However, if one looks to educational technology and distance learning as a tool to promote equity and access to learning, the lack of additional impact is not of great concern providing the costs and impact are not greatly dissimilar. In using new technology there are practical limitations. For example, while various

ministries in the Philippines all maintain studios to produce programs, at considerable expense, there is a lack of funds at the local level to buy time on private TV networks to broadcast the programs that have been developed . In some countries, including many areas of Brazil, the use of interactive computer technology is not practical on a broad scale because many households do not have telephones. In these situations a "village" connection at a community center or adult education facility may be an alternative. This option is currently being developed in Hungary. The purchase and maintenance of educational technology may be more expensive than providing an on-site instructor. However, the field holds much promise, particularly for adults who need flexible access to education and training that they can use at home or work.

Table 6- Media, Technologies, Distance Education and Applications

Media	Technologies	Distance education application	One-way technology applications	Two-ways technology applications
Text	Print Computers	Course units, supplementary materials, correspondence tutoring, data bases, electronic publishing	Course units, supplementary materials	Correspondence tutoring
Audio	Cassettes, radio, telephone	Programs, lecturers, video conferencing	Cassette programs, radio programs	Telephone tutoring, audio-conferencing
Television	Broadcasting, videocassettes, cable, videodiscs, satellite, fiber optics, ITFS, microwave	Programs, lectures, video-conferencing	Broadcast programs, cassettes programs	Interactive television (TV out, telephone in), video-conferencing
Computing	Computers, telephone, satellite, fiber optics, ISDN, CD-ROM, video-disc	Computer-aided learning (CAI, CBT), e-mail, computer-conferencing, audio-graphics, databases, multimedia	CAL, CAI, CBT databases, multimedia	E-mail, computer-conferencing

Source: Bates (1996).

VI. Evaluation

6.1 Evaluation of ACE is generally lacking, particularly in middle income countries. Evaluations that have been conducted primarily focus on basic/foundation and occupational education and training programs, as opposed to civics or developmental education. Three general types of evaluation that are encountered include: (a) evaluation of the inputs to ACE including staff, facilities, resources; (b) evaluation of participants at the end of ACE programs, to determine the degree to which they have met program objectives, if they were clearly specified; and (c) evaluation of net program impacts, did the participants gain knowledge and skills that had a significant impact on their life. The first and second category of evaluation are often addressed during accreditation and licensing, the second category is a common ACE activity, but the third category of evaluation is usually missing. It is recognized that it is difficult to measure the net impact of civics and developmental education. However the impact of basic literacy, and career and vocational training, is easier to quantify and evaluate.

6.2 *Evaluating literacy programs.* Most countries evaluate the performance of adults at then end of literacy and basic education programs because the programs are often directly tied to achievement of initial school certification (e.g. primary or secondary school certificates). Impact evaluations are much less common. One of the most comprehensive and cross cutting evaluations of literacy was the seven country comparative study done by the OECD in cooperation with Statistics Canada. The results were published in 1995.[5] This study initially included seven countries, but has now been replicated and broadened to include another 8 countries[6] and these results are to be published in 2000. The study aimed to make valid comparisons of people of all abilities across countries, and defined literacy in terms of a broad set of skills which included the "use of printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential." The major findings have already been noted in previous paragraphs (see paragraph 2.5), however one of the key outcomes was that the data have demonstrated to be comparable across language and culture, its results have a wide interest and will be useful for different kinds of analysis and each country will be able to make use of its own data.

6.3 *Evaluating occupational training programs.* Evaluation of career and vocational education programs in ACE is more wide-spread and includes accreditation, program, and impact evaluations. The latter is perhaps the most important, but the least frequently encountered, and is of two types, gross and net impact.

- *Gross impact:* This involves defining "performance indicators" for each program, based on the objectives of the program (e.g. increased probability of employment, enhanced wages), then measuring the extent to which program participants meet these indicators. Performance indicator evaluation systems can help program managers establish targets, provide them with information regarding the degree to which programs are achieving agreed outcomes, provide comparisons between

[5] The updated edition of the OECD study is forthcoming in 2000.
[6] Chile, Czech Republic, Denmark, Finland, Hungary, Italy, Norway and Slovenia.

programs and regions, and improve cost-effectiveness of programs. However, performance indicator evaluations do not provide net impact data, as they do not compare participants with similar non-participants.

- *Net Impact:* This evaluation method relies on "comparison group design" procedures, provides net-impact information, and can assist program managers and policy makers to make key decisions about program design and implementation. Comparison group design evaluations accomplish this by comparing the degree to which program participants and non-participants - with similar observable characteristics - achieve program outcomes (e.g., do participants in training programs have a better success rate than non-participants).

6.4 An example of the latter type of evaluation is the recent quasi-experimental design study coordinated by the World Bank in Hungary, Poland, the Czech Republic and Turkey. This study found that training of the unemployed can have a positive impact on employment and earnings (Fretwell et al. 1999). A summary of the results is presented in Table 7. In addition the Study found that in general short-term training was as effective as long-term training. Individual "voucher-type" training may be more effective than group training, if service providers are available. Private and public providers can deliver effective training, but private and enterprise provision may be more effective. The general conclusions are supported by ILO and OECD reviews. With respect to subgroups, the Study indicated that training can have a positive net impact for: both males and females, but the impact may be higher for females; young and middle aged workers, as opposed to older workers; both short and long-term unemployed, but the impact may be greater for the short-term unemployed; and those with primary and secondary education, as opposed to those with post-secondary qualifications. The finding for women is similar to the finding by the OECD, but the finding on lower educational qualifications is not supported by OECD reviews.

Table 7- Overall Impact of Training Programs

Variable	Czech Republic	Hungary /1	Poland	Turkey
Any Employment	+0.11***	+0.17 **	+0.10**	+0.02 /2
Current Employment /3	+0.03 /2	+0.12 **	+0.14**	-0.06 ***
Initial Monthly Earnings	N/A	$10 *	N/A	N/A
Current Monthly Earnings	+$86 ***	$5	+$7**	+$32 ***
Unemployment Comp. /4	+$198 ***	-$27	+$94*	Na

na - Not available
*** Impact statistically significant at the 99 percent level of confidence
** Impact statistically significant at the 95 percent level of confidence
* Impact statistically significant at the 90 percent level of confidence
/1 Group training
/2 Impact on self -employment was positive
/3 At the time of the survey
/4 Positive means more unemployment benefits were paid to participants.
Source: Fretwell, Benus and O'Leary (1999).

6.5 Net impact evaluations can supplement ongoing performance management systems that track gross outcome indicators of programs. Middle income countries can implement both performance management, and quasi-experimental design evaluation programs without large investments, when compared to the potential savings and more effective use of ACE program resources. Several middle income countries - including Brazil, Chile, China, Bosnia Herzegovina and Bulgaria - are currently moving forward to evaluate the net impact of retraining programs, proving that it can be done and, when it is, programs can be more effectively targeted and public funds used more effectively. There is limited evidence that private sector employers are undertaking similar evaluations. Once trained, workers' greater productivity enables them to earn more; they switch jobs less frequently, thus reaping the wage gains associated with training for the job and firm; and they are rarely unemployed. If they change jobs, they find another more easily and are more likely to receive further training from their new employers, while those who start their careers lacking sound academic and problem-solving skills fall further behind (Tuijnman 1998).

6.6 *Evaluating employer based training.* While studies on the impact of education on productivity have traditionally focused on initial education provided in institutional settings, less is known about the contribution of ACE – particularly skill training - provided by employers. However, employer-sponsored projects have proved to be successful in increasing workers' productivity and expanding the resources available for skills development in middle- and low-income countries. By training only for their needs, firms do not face the problem of matching training supply and demand. Moreover, employers are in a better position to assess what skills are needed and how can be developed in the labor market. In a 1995 Study by Hong and Batra, it is illustrated how enterprise training affects productivity income in developing countries. Empirical analysis of data from Colombia, Mexico, Malaysia, Indonesia and Taiwan, China indicate that training is found to have a positive and statistically significant impact on firm-level productivity in all the countries considered in the sample (Hong and Barter 1995). However, employers do not tend to train unskilled workers to the same extent as more highly educated workers, as previously noted in paragraphs 5.6 and 6.5.

6.7 Hong and Batra (1995) found that the need to train the workforce is directly related to the size of the enterprise, its core business and technology involved, its organizational process and the orientation of its market - domestic or international. Larger firm sizes are associated with higher likelihood of formal training for skilled workers, notably in case of a multi-plant firm (Table 8). Enterprise training, especially in-house training, is most needed in firms involved in high tech business or relying on advanced technologies and in case of semi- or fully automatic production lines. In addition, because of the greater exposure to new production techniques and competitive forces, training is a crucial factor for the success of export-oriented firms (Hong and Batra 1995). These findings are of paramount relevance to the situation of middle and upper-income countries, which, for size of enterprises, technological endowments and outward orientation, have the potential to successfully engage in the global economy.

Table 8- Incidence of Training by Source of Training and Firm Size

	Colombia				Indonesia[1]				Malaysia				Mexico			
Characteristics	*XS*	*S*	*M*	*L*	*XS*	*S*	*M*	*L*	*XS*	*S*	*M*	*L*	*XS*	*S*	*M*	*L*
Number of firms	46	143	139	62	-	62	58	185	153	638	932	453	661	1060	1546	1789
% Firms training informally	67.64	77.84	88.64	87.23	-	15.74	32.64	16.4	56.48	80.49	88.81	92.41	7.39	36.11	44.71	30.43
% Firms training formally	32.87	52.08	79.34	81.31	-	16.63	19.88	30.95	9.45	19.28	43.71	69.47	5.50	41.77	59.05	49.04
% Firms training internally formally	3.06	2.38	9.62	12.77	-	11.35	2.18	9.79	5.93	14.22	31.20	52.15	2.54	22.55	39.43	39.90
% Firms training externally	32.87	50.94	76.81	81.31	-	10.91	17.71	28.84	5.05	8.13	25.60	50.83	3.88	30.59	45.67	40.23

Notes:
XS = Micro firms: 15 or fewer workers
S = Small firms: 21-100 workers
M = Medium firms: 101-250 workers
L = Large firms: more than 250 workers
[1] There are no micro firms in the Indonesia sample.
Source: Hong and Batra (1995).

VII. Conclusions and Implications for Policy

7.1 *Needs vary.* While ACE - and lifelong learning - are increasingly recognized as essential ingredients for economic growth and productivity in developed countries, development of the sector varies considerably in MICs. The development of the sector is affected by historical, political, literacy, environmental, fiscal, economic, and governmental factors; all of which vary between, and sometimes within, MICs. For example, civics education in Hong Kong is affected by different factors than in Hungary or Chile. Development education will take a different form in the Amazon Basin than in Singapore, Japan, or Slovenia. Basic and foundation education will have different emphases in rural Philippines and rural Brazil than in Sao Paulo, Chile, and Hungary. And career and vocational training may have different emphases in Poland than in Chile or Korea. Development of the ACE must reflect the unique background and needs of the country concerned.

7.2 *Emerging trends require new approaches to governance, administration and finance.* These individuals need access to opportunities to gain the additional knowledge and skills necessary to function in an increasingly global economy. However, some MICs are having difficulty in moving from historical Ministry of Education dominated systems of governance, administration, and financing. These ministries are often focused primarily on literacy and "second chance" education, and are sometimes are not attuned to the broader needs of "extended chance" education, when an increasing proportion of youth and adults have completed primary school and have basic literacy skills. Some countries, such as Slovenia, Malaysia, and Hungary, have set up special institutions, mechanisms, and Boards to broaden stakeholder involvement and program concepts, while still allowing the previous network to compete for and use new resources. These models, and similar ones in developed countries, should be reviewed by MICs which are trying to modernize ACE governance and administration.

7.3 *Delivery mechanisms need to be diversified.* Decentralization and encouraging NGO and private sector delivery are two ways to promote diversity of program offerings and address some of the problems noted in the previous paragraph. But, these approaches can encounter and create other problems including equity, access, quality, and program articulation. To offset these problems steps need to be taken to: set standards for programs and institutions, ensure financing is available to support special groups of clients, and ensure that there is articulation between programs when needed. There are a number of excellent models where program standards, institutional accreditation systems, and financing programs for special groups have been established to ensure these issues are addressed.

7.4. *Knowledge of adult learning theory and practice needs to be strengthened.* Delivery of ACE in many MICs reflects out of date pedagogy, lack of use of modern educational technology, and a lack of knowledge of adult learning theory and research. There is often little if any professional training for ACE managers and staff at higher

education institutions; and a lack of in-country capacity to review, implement, and disseminate findings of ACE research and evaluation studies. This problem is often exacerbated by the use of existing initial education and public school staff and institutions to deliver ACE. While it is recognized that there may be a need to use existing public facilities for ACE in some countries and regions, there is a need to develop a capability to train ACE staff, develop appropriate teaching materials, and develop flexible entry/exit and modular education and training programs to ensure ACE reflects adult needs.

7.5 *In summary,* ACE is a multi-faceted program that must address multiple learning objectives through a combination of short and long-term programs, to a broad range of clients, in what are often non-conventional settings. Promoting these programs can be facilitated by fostering a market driven approach whereby public, private, and NGO service providers are encouraged and supported to develop and deliver programs. However, promoting a market driven decentralized approach still requires some professional leadership and coordination to set standards, develop accreditation procedures, stimulate staff and curriculum development in high priority areas, promote and disseminate of research on ACE, and finance services for selected clients to help ensure equity and access. The combination of a "market driven approach" with "leadership" that includes key stakeholders can and has resulted in development of strong ACE programs in both developed and middle income countries. The Government's role in ACE should primarily be one of creating a policy and regulatory framework, in cooperation with key stakeholders; promotion of professional development in ACE; and limited and carefully targeted participation in the financing and delivery to help ensure equity, access, and quality in ACE. MICs which are developing ACE as an integral part of lifelong learning, would be well advised to examine these models presented in this paper and adapt elements that fit their unique needs.

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